## ABSTRACT OF THE INVENTION

A multiple measurement memory-type electronic thermometer includes an ear temperature measuring unit, a microprocessor, a keypad unit, a display unit, and a memory unit. The ear temperature measuring unit, the display unit, and the memory unit are controlled by the microprocessor. When the activation key of the keypad unit is pressed by the user, being controlled by the microprocessor, the ear temperature unit is activated to perform measurement. The measuring result of the ear temperature unit is sent back to the microprocessor, displayed by the display unit, and saved in the memory unit. The memory unit is partitioned into a plurality of independent memory sectors. Each sector includes a queue data structure, such that the ear temperature measured from each person and the measuring time can be stored in the corresponding memory sector. Therefore, measurement of multiple people can be performed, memorized and retrieved.

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